IN THE CLAIMS

1. (Currently Amended) A modulating device for modulating and demodulating data for transmission from a first device to a second device, comprising modulating means capable of modulating and demodulating the data according to at least a first and a second modulation technique using common digital modulation components, ~~and~~ a switching means for automatically switching between at least the first and the second modulation ~~techniques.~~ <u>techniques, and a plurality of building blocks, wherein at least one of the plurality of building blocks is used for at least one of modulating and demodulating data according to the at least first and second modulation techniques, wherein at least one building block comprises a programmable finite impulse response filter, a look-up table, and a serial-to-parallel converter, and wherein the programmable finite impulse response filter is used as a correlator in a first mode of the first modulation technique.</u>

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The device according to claim ~~3~~<u>, 1</u>, wherein ~~said~~ <u>the</u> programmable finite impulse response filter is programmable to ~~a~~ <u>the</u> first <u>mode</u> and a second mode for ~~said~~ <u>the</u> first and second modulation techniques, respectively.

5. (Cancelled)

6. (Currently Amended) The device according to claim 4, wherein ~~said~~ <u>the</u> programmable finite impulse response filter is used as matched filters in the second mode.

7. (Currently Amended) The device according to claim ~~3~~<u>, 1</u>, wherein ~~said~~ <u>the</u> programmable finite impulse response filter is adaptable by varying its weights.

8. (Currently Amended) The device according to claim 4, wherein said the look-up table includes data related to said the first and second modulation techniques.

9. (Currently Amended) The device according to claim 8, wherein said the look-up table comprises n input words, m output words relating to said the first modulation technique, and p output words relating to said the second modulation technique, wherein n ≥ m and n ≥ p, and wherein n, m and p are integers.

10. (Currently Amended) The device according to claim 9, wherein n > p and wherein only p input words are used for determining output words related to said the second modulation technique.

11. (Currently Amended) The device according to claim 2, 1, further comprising timing means adjustable to a first clocking time used for modulating and demodulating data according to said the first modulation technique and a second clocking time used for modulating and demodulating data according to said the second modulation technique.

12. (Currently Amended) The device according to claim 11, wherein said the timing means comprises a serial-to-parallel converter.

13. (Currently Amended) The device according to claim 4, wherein said the modulating means automatically switches between said the first and second modes.

14. (Currently Amended) The device according to claim 1, wherein said the first and second modulation techniques are Complementary Code Keying (CCK) with Differential Quadrature Phase Shift Keying (DQPSK) (CCK+DQPSK) and Gaussian Frequency Shift Keying (GFSK) modulation techniques.

15. (Currently Amended) The device according to claim 1, wherein said the first and second modulation techniques are Quadrature Phase Shift Keying (QPSK) and Gaussian Frequency Shift Keying (GFSK) modulation techniques.

16. (Currently Amended) The device according to claim 1, wherein said the first and second modulation techniques are a frequency modulation technique and a quadrature modulation technique.

17. (Currently Amended) An electronic device for communicating data to and receiving data from a second electronic device, the device comprising modulating means capable of modulating and demodulating the data according to at least a first and a second modulation technique using common digital modulation components, and a switching means for automatically switching between at least the first and the second modulation techniques. techniques, and a plurality of building blocks, wherein at least one of the plurality of building blocks is used for at least one of modulating and demodulating data according to the at least first and second modulation techniques, wherein at least one building block comprises a programmable finite impulse response filter, a look-up table, and a serial-to-parallel converter, and wherein the programmable finite impulse response filter is used as a correlator in a first mode.

18. (Currently Amended) A method for modulating data for transmission from a first device to a second device and demodulating modulated data suitable for a first modulation technique such that the data is modulated and demodulated according to at least a first and a second modulation technique, the method comprising providing a common digital modulation component used in both techniques, and providing a switching means for automatically switching between at least the first and the second modulation techniques. techniques, and providing a plurality of building blocks, wherein at least one of the plurality of building blocks is used for at least one of modulating and demodulating data according to the at least first and second modulation techniques, wherein at least one building block comprises a programmable

<u>finite impulse response filter, a look-up table, and a serial-to-parallel converter, and wherein the</u>
<u>programmable finite impulse response filter is used as a correlator in a first mode.</u>